

Australian Standard<sup>®</sup>

**Application of polyethylene sleeving for  
ductile iron piping**

**STANDARDS**  
Australia



This Australian Standard® was prepared by Committee WS-016, Cast Iron Pressure Pipes and Fittings. It was approved on behalf of the Council of Standards Australia on 28 August 2008.

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The following are represented on Committee WS-016:

- Australian Chamber of Commerce and Industry
  - Australian Industry Group
  - Certification bodies (Australia)
  - Plastics Industry Pipe Association of Australia
  - Water Services Association of Australia
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Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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RECONFIRMATION

OF

AS 3681—2008

Application of polyethylene sleeving for ductile iron piping

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Technical Committee WS-016 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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NOTES

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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee WS-016, Cast Iron Pressure Pipes and Fittings, to supersede AS 3681—1989, *Guidelines for the application of polyethylene sleeving to ductile iron pipelines and fittings*.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to provide requirements for the application of polyethylene sleeving that complies with AS 3680, *Polyethylene sleeving for ductile iron piping*.

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## FOREWORD

Polyethylene film was first used as a corrosion protection device for buried cast iron pipes in the USA in the early 1950s and subsequently in Australia since the mid-1960s; it has proved to be an effective method of controlling corrosion in aggressive soils, provided the integrity of the sleeving remains intact, and is now used for this purpose throughout the world.

The purpose of the loose polyethylene sleeving is to prevent contact between the pipeline and adjacent soils, thus providing a non-aggressive environment for the pipeline and minimizing corrosion. Free flow of ground water within the sleeving is not acceptable and would not be expected to occur with properly installed sleeving. The effectiveness of the sleeving is not impaired by the presence of condensate or small amounts of water which may be trapped within the sleeve.

## STANDARDS AUSTRALIA

### Australian Standard

## Application of polyethylene sleeving for ductile iron piping

### 1 SCOPE

This Standard specifies requirements for the application of loose polyethylene sleeving intended for the corrosion protection of buried ductile iron piping.

NOTE: Polyethylene sleeving for ductile iron piping is specified in AS 3680.

### 2 REFERENCED DOCUMENT

The following document is referred to in this Standard.

AS

3680 Polyethylene sleeving for ductile iron piping

### 3 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

#### 3.1 Layflat tube

A tubular form of polyethylene film flattened for handling and storage.

#### 3.2 Loose polyethylene sleeving (sleeving)

Polyethylene film in tube form, used to encase pipes or fittings but which is not bonded to the surface.

#### 3.3 Nominal diameter (DN)

A numerical designation of pipe diameter that is a convenient rounded number for reference purposes and approximates the internal diameter.

NOTE: It is designated by DN followed by the number.

#### 3.4 Strap and buckle

Strap and buckle as specified in AS 3680 Appendix D.

#### 3.5 Tape

Tape (or adhesive tape) as specified in AS 3680 Appendix D.

### 4 GENERAL

Appropriately coloured sleeving shall be selected to designate the contents of the pipeline (see AS 3680).

It is recommended pipes and fittings be sleeved individually immediately prior to laying. Pre-sleeving a number of pipes before installation is not recommended, but where it does occur, provision for suitable storage of sleeved pipes (such as sandbags) is recommended to prevent sleeving damage. Before application of the sleeving, the surface of the pipe or fitting shall be free of foreign material such as clay. Where site conditions significantly increase the risk of sleeving penetration, it is recommended consideration be given to double wrapping, i.e. where cast in-situ anchor-blocks are used.

Adhesive tape shall be used for sealing the sleeving to the surface of the pipe or fitting.